

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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| In re Application of |) | |
| |) | |
| DONALD L. SCHILLING |) | |
| |) | |
| Serial No. NOT YET KNOWN |) | Group Art Unit: |
| |) | |
| Filed: NOT YET KNOWN |) | Examiner: |
| |) | |
| For: MULTICHANNEL SPREAD-SPECTRUM |) | |
| PACKET |) | |
| _____ |) | |

Honorable Commissioner of Patents
and Trademarks
Washington, D.C. 20231

Sir:

PRELIMINARY AMENDMENT A

Prior to calculating to filing fees, enter the following
amendments:

IN THE TITLE:

Delete the title in its entirety and substitute the
following therefor:

--PACKET SPREAD-SPECTRUM RECEIVER--.

IN THE SPECIFICATION:

Page 28, line 1, change "WE CLAIM" to --I CLAIM--.

In the Abstract:

Delete the Abstract in its entirety, and substitute the
following therefor:

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spread-spectrum signal as a plurality of received spread-spectrum channels, respectively; and

10 multiplexing the plurality of received spread-spectrum channels as received data.

17. The method as set forth in claim 16, with the step of processing the header further including the steps of:

detecting, at a processing frequency, the header in the packet-spread-spectrum signal;

5 outputting, responsive to detecting the header, a header-detection signal; and

generating, responsive to the header-detection signal, control and timing signals.

18. The method as set forth in claim 16 or 17, further including, after the step of multiplexing, the step of storing the received data.

19. The method as set forth in claim 16 or 17, further including, after the step of multiplexing, the step of decoding the received data.

20. The method as set forth in claim 16, further including, before the step of processing the header, translating the packet-spread-spectrum signal from a carrier frequency to a

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5 processing frequency.

21. The method as set forth in claim 20, further including, generating, responsive to the reference signal, control and timing signals.

22. A packet receiver comprising:

10 header-detection means for processing a header in a packet-spread-spectrum signal, to generate a reference signal;

15 receiver-spread-spectrum means, coupled to said header-detection means, responsive to the reference signal, for despreading a multichannel-spread-spectrum signal embedded in the packet-spread-spectrum signal as a plurality of received spread-spectrum channels, respectively; and

20 multiplexing means, coupled to said receiver-spread-spectrum means, for multiplexing the plurality of received spread-spectrum channels as received data and for outputting the received data to a data output.

23. The packet receiver as set forth in claim 22, with said header-detection means including means for detecting, at a processing frequency, the header in the packet-spread-spectrum signal and for outputting, responsive to detecting the header, a header-detection signal, and for generating, from the header-detection signal, control and timing signals.

24. The packet receiver as set forth in claim 22 or 23, further including, after said multiplexing means, receiver-memory means for storing the received data.

25. The packet receiver as set forth in claim 22 or 23, further including, after said multiplexing means, decoding means for decoding the received data.

26. The packet receiver as set forth in claim 22, further including translating means for shifting the packet-spread-spectrum signal from the carrier frequency to a processing frequency.

27. A packet receiver comprising:

a header-detection device for processing the header in a packet-spread-spectrum signal to generate a reference signal; receiver-spread-spectrum means, coupled to said header-detection device, for despreading a multichannel-spread-spectrum signal embedded in the packet-spread-spectrum signal as a plurality of received spread-spectrum channels, respectively; and

a multiplexer, coupled to said receiver-spread-spectrum means, for multiplexing the plurality of received spread-spectrum channels as received data.

28. The packet receiver as set forth in claim 27, with

said header-detection device further including means for detecting, at the processing frequency, the header in the packet-spread-spectrum signal, for outputting, responsive to detecting the header, a header-detection signal, and for generating, from the header-detection signal, control and timing signals.

29. The packet receiver as set forth in claim 27 or 28, further including, after said multiplexer, a receiver memory for storing the received data.

30. The packet receiver as set forth in claim 27 or 28, further including, after said multiplexer, a decoder for decoding the received data.

31. The packet receiver as set forth in claim 27, further including a translating device for translating the packet-spread-spectrum signal from the carrier frequency to a processing frequency.--

REMARKS

In a parent patent application, the Examiner required a restriction requirement, to one of three groups. Group II is elected, and the claims are amended so that claims only from Group II are pending in the application. The Title and Abstract of Disclosure are amended accordingly, to be consistent with the

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elected group. A copy of the Abstract of Disclosure is attached, as a separate sheet.

Respectfully submitted,

DAVID NEWMAN, CHARTERED

Date: December 5, 2000

By: 

David B. Newman, Jr.
Registration No. 30,966

--ABSTRACT OF DISCLOSURE

A spread-spectrum receiver for receiving data from a spread-spectrum packet-switched system. A multichannel spread-spectrum signal includes encoded data, which is demultiplexed into sub-data-sequence signals. Each sub-data-sequence signal is multiplied by a respective chip-sequence signal to generate a plurality of spread-spectrum channels. The plurality of spread-spectrum channels are combined as a multichannel spread-spectrum signal. The multichannel spread-spectrum signal is concatenated with a header to output a packet-spread-spectrum signal which is transmitted over radio waves to a packet receiver. A processor at the packet receiver obtains timing for the multichannel spread-spectrum signal from the header. The multichannel spread-spectrum signal is then despread by a plurality of data-matched filters and multiplexed by a multiplexer as received-encoded data. The received-encoded data is decoded by a decoder and stored in a receiver memory for output.--

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A spread-spectrum receiver for receiving data from a spread-spectrum packet-switched system. A multichannel spread-spectrum signal includes encoded data, which is demultiplexed into sub-data-sequence signals. Each sub-data-sequence signal is multiplied by a respective chip-sequence signal to generate a plurality of spread-spectrum channels. The plurality of spread-spectrum channels are combined as a multichannel spread-spectrum signal. The multichannel spread-spectrum signal is concatenated with a header to output a packet-spread-spectrum signal which is transmitted over radio waves to a packet receiver. A processor at the packet receiver obtains timing for the multichannel spread-spectrum signal from the header. The multichannel spread-spectrum signal is then despread by a plurality of data-matched filters and multiplexed by a multiplexer as received-encoded data. The received-encoded data is decoded by a decoder and stored in a receiver memory for output.--

IN THE CLAIMS:

Delete claims 1-15, and add the following claims:

--16. A method, using a packet receiver, comprising the steps of:

processing a header in a packet-spread-spectrum signal, to generate a reference signal;

despreading, responsive to the reference signal, a multichannel-spread-spectrum signal embedded in the packet-